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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,243	03/25/2004	Kazushige Noguchi	FUJI 141	5025

7590 12/14/2006

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EXAMINER	
HUNNINGS, TRAVIS R	
ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/808,243	NOGUCHI, KAZUSHIGE	
	Examiner	Art Unit	
	Travis R. Hunnings	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24 and 26-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *2-11 and 28-42* is/are allowed.

6)☒ Claim(s) *1,12-24,26,27 and 43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 January 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 23, 24, 27 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer et al. (Slemmer; US Patent Application Publication 2004/0252034) in view of Witte (US Patent 6,862,443).

Regarding claim 1, Slemmer discloses *Automated Parking Director Systems And Related Methods* that has the following claimed limitations:

The claimed server for managing parking information about a parking lot having a plurality of parking spaces is met by the processor controlling the information regarding the parking spaces (paragraph 33);

The claimed plurality of wireless LAN base stations installed in the parking lot for wirelessly transmitting and receiving the parking information, each of the plurality of wireless LAN base stations having a transmittable and receiving, the plurality of wireless LAN base stations forming a wireless LAN system such that each of the plurality of wireless LAN base stations can wirelessly connect to a wireless LAN first mobile station of a first mobile object when the first mobile object exists in its own transmittable and receivable area and to a wireless LAN second mobile station of a second mobile object

when the second mobile object exists in its own transmittable and receivable area is met by the multiple processors, each communicating with mobile personal communication devices using any form of communication mechanism for allowing a plurality of data processing systems with respective output displays to communicate (paragraphs 33-36);

The claimed centralized server for managing the parking information that has communication means for communicating the parking information between the plurality of wireless LAN base stations and the server via an IP network operating with internet protocol and wherein the wireless LAN mobile station and the server can communicate the parking information through the wireless LAN system and the communication means is met by the processor receiving and storing information regarding parking lot information from a plurality of object (parking space) detectors over a wired or wireless communication link and also providing that parking information back to wireless communication devices, such as those in vehicles as shown in figure 2, using any form of communication mechanism for allowing a plurality of data processing systems with respective output displays to communicate which would include an IP network (paragraph 33-36).

Slemmer does not specifically disclose the claimed wireless LAN first mobile station of the first mobile object having unique first identifying information, and accepting or rejecting an incoming wireless signal depending on whether identification information in the incoming wireless signal matches the unique first identifying information and wherein the wireless LAN second mobile station of the second mobile object has unique

second identifying information and accepts or rejects an incoming wireless signal depending on whether identification information in the incoming wireless signal matches the unique second identifying information. Witte discloses *Remote Communication System For Use With A Vehicle* that teaches using unique identification for wireless communication devices so that a communication link can be established only when the identification matches (column 5, lines 7-25). Including a identification protocol in all the devices of Slemmer would increase the security of the devices and allow for only authorized communication signals to get through and therefore it would reduce the noise the system received. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer according to the teachings of Witte to have unique identification information for all the mobile devices and reject/accept signals based on that identification information.

Regarding claim 23, the claimed first and second mobile objects being portable communication devices is met by the device being a smartphone (paragraph 34).

Regarding claim 24, the claimed portable communication devices being telephones is met by the device being a smartphone (paragraph 34).

Regarding claim 27, the claimed incoming wireless signal supplying information from the server about available parking spaces that are near the first and second mobile objects is met by the transmitters of Kirkpatrick sending out signals to the receivers with

information regarding the availability of parking spaces in the lot (column 6, lines 46-62 and column 7, lines 10-33).

Regarding claim 43, the claimed first identifying information and the second identifying information are stored in the server is met by the ID being stored in both locations (column 5, lines 7-25). It would have been obvious to store the ID in both locations of Slemmer according to the teachings of Witte including the server in order to verify the identity of the communications.

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer in view of Witte and further in view of Clapper (US Patent 6,147,624).

Regarding claim 12, Slemmer and Witte disclose all of the claimed limitations except for the claimed server including vehicle position registration means for identifying and registering vehicle position signals, which shows a vehicle position, in connection with the wireless LAN first and second mobile stations, the mobile first and second objects generating the vehicle position signals and supplying the vehicle position signals to the wireless LAN mobile stations, and the vehicle position signals are supplied from the wireless LAN mobile station to the server through the wireless LAN system and the communication means. Clapper teaches a GPS device located in the vehicle for transmitting the current vehicle position to the central server so that the server can calculate the needed route to reach the closest unoccupied parking space as shown in

figures 3 and 4 (column 2, lines 56-67). Adding a GPS device to the mobile devices and transmitting the car's location to the central server so the server can calculate a desired route would make the device easier to use and more functional by showing the operator exactly where to go to find the nearest open space. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer and Witte according to the teachings of Clapper to include a position detecting device and providing the server with the vehicle position through the communication link for each of the vehicles in the system.

4. Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer in view of Witte further in view of Clapper and further in view of Johnson et al. (Johnson; US Patent 6,694,258).

Regarding claim 13, Slemmer, Witte and Clapper disclose all of the claimed limitations except for the claimed server including vehicle position information generating means for extracting the registered vehicle positions and for generating vehicle position information signals which indicates the vehicle positions and the vehicle position information signals being supplied from the server to the wireless LAN first and second mobile stations through the wireless LAN system and the communication means. Johnson discloses *Hand Held Car Locator* that teaches a mobile device that stores the location of a parked vehicle in a parking lot with a centralized server and retrieving that information using the mobile device to locate the parked vehicle (column

2, lines 51-65). Modifying the system of Slemmer, Witte and Clapper to include a mobile device that can retrieve the location of the vehicle stored at the central server would help guide the user back to their vehicle. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer, Witte and Clapper according to the teachings of Johnson to include a device which stores the position of the vehicle at the central server and a mobile device that can request the location information from the server upon command for each of the vehicles in the system.

Regarding claim 14, the claim is interpreted and rejected as claim 13 stated above.

Regarding claim 15, the claimed parking condition information signals including voice signals which indicates a non-occupied parking space by voice is met by the parking information being provided using an automated voice (paragraph 11).

Regarding claim 16, the claimed parking lot management system wherein the first and second mobile objects have software to prepare and utter voice messages to indicate the vehicle positions in response to the voice signals is met by the information received by a transmitter being broadcast by voice over a speaker (column 7, lines 46-53). The claimed 'software' used to produce the voice in response to the signal would

have been obvious to one of ordinary skill in the art to implement in vehicle systems using a computer system.

Regarding claim 17, the claimed parking lot management system wherein the vehicle position informaiotn signals include image signals which display a map near the respective wireless LAN mobile station and indicates the vehicle position is met by the information received from the transmitters being displayed as a visual map to the vehicle operator (column 7, lines 10-33).

Regarding claim 18, the claim is interpreted and rejected as claim 17 stated above. The claimed 'software' used to produce the voice in response to the signal would have been obvious to one of ordinary skill in the art to implement in vehicle systems using a computer system.

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer in view of Witte further in view of Clapper further in view of Johnson and further in view of Li.

Regarding claim 19, Slemmer, Witte, Clapper and Johnson disclose all of the claimed limitations except for the claimed plurality of parking spaces respectively having lighting systems to indicate the vehicle positions, the vehicle position information signals including lighting control signals to indicate the vehicle positions by activating

corresponding ones of the plurality of lighting systems, the wireless LAN system being configured such that the plurality of wireless LAN base stations are wirelessly connected to the plurality of lighting systems within the respective transmittable and receivable areas, the lighting control signals being supplied from the server to the one of the plurality of lighting systems through the wireless LAN system and the communication means and the one of the plurality of lighting systems is activated in response to the lighting control signals. Li teaches guiding lights located on the floor of the parking lot or garage that guide drivers to unoccupied spots in the garage (column 3, lines 38-48). It would have been obvious to one of ordinary skill in the art to include the lighting systems of Li and modify the system to both guide a vehicle to an unoccupied space and to guide a operator back to the parked vehicle upon the operator requesting the vehicle location from the central server as taught by Johnson (see rejection to claim 13 above) in order to more easily guide the operator back to their vehicle. The claimed 'wireless' controlling of the lighting systems would have been obvious to one of ordinary skill in the art to use either a wired or wireless controlling system. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer, Witte, Clapper and Johnson according to the teachings of Li to include lighting systems to guide the user to open spots and back to their vehicles.

6. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer in view of Witte and further in view of Haynes et al. (Haynes; US Patent 6,816,085).

Regarding claim 20, Slemmer and Witte disclose all of the claimed limitations except for the claimed additional wireless LAN base stations being provided at an entrance and an exit of the parking lot being wirelessly connected to the mobile object to detect entrance and exit of the wireless LAN first and second mobile stations into and from the parking lot, providing the server an entrance and exit signal and storing the entrance and exit time at the server. Haynes discloses *Method For Managing A Parking Lot* that teaches placing parking interaction devices at the entrance and exit of a parking lot that registers the entrance and exit of a vehicle for charging the vehicle a fee based on the length of time spent in the parking lot (column 5, lines 16-35). Adding transmitters to the entrance and exit of the parking lot system of Slemmer and Witte while also providing the server with means to register and store the entrance and exit time of vehicles would allow the owner of the lot to easily compute and receive the fee for parking lots that charge to park. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer and Witte according to the teachings of Haynes to include transmitters at the entrance and exit of the parking lot that are capable of registering the enter and exit times of a vehicle in order to charge the vehicle a fee to park.

Regarding claim 21, Slemmer and Witte and Haynes disclose all of the claimed limitations except for the claimed requesting signal requesting a presentation of a parking time and/or a parking fee. Examiner takes official notice that it is well known in the art for toll systems to display time and/or parking fee information on a display board located at the exit of parking lots when a vehicle is exiting the lot in order to allow the user to double-check the amount that was charged.

Regarding claim 22, the claimed wireless LAN base station being provided at a store which ties up with the parking lot so that the parking information can be communicated at the store is met by the parking system being used at many different places including public events, airports, stadiums, commuter lots, office buildings or other large parking areas (paragraph 2).

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Slemmer in view of Witte and further in view of Nelson et al. (Nelson; US Patent Application Publication 2004/0212519).

Regarding claim 26, Slemmer and Witte disclose all of the claimed limitations except for the claimed communication device is carried by a driver of the vehicle and the server stores position information about the vehicle when the vehicle is parked based on the identification information. Nelson discloses *Method And Apparatus For Obtaining Data Regarding A Parking Location* that teaches storing information regarding

parking lots including users, user devices, parking locations, etc (paragraph 85). Storing additional information in the central server of Slemmer and Witte would provide the user with more valuable information regarding the parking lot. It would have been obvious to store the parking location of a user device in the central server for retrieval at a later time therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device disclosed by Slemmer and Witte according to the teachings of Nelson to modify the device to store information regarding the parking location of a vehicle according to the vehicle communication device identification information.

Allowable Subject Matter

8. Claims 2-11 and 28-42 are allowed.

Response to Arguments

9. Applicant's arguments filed 29 September 2006 have been fully considered but they are not persuasive. Applicant argues the following:

Argument A: One of ordinary skill in the art would not have thought that Slemmer's system was insecure or had a problem with unauthorized communication and therefore would not have modified it according to the teachings of Witte.

Argument B: Witte fails to explicitly teach a comparison of the ID signals or what to do when they match.

Argument C: Witte's key FOB is tied to a particular vehicle and not used in a broadcast mode for multiple vehicles.

Responses:

Regarding argument A, one of ordinary skill in the art, after reading Witte, would have realized that the addition of identification matching in communication systems would be a benefit, not only to ensure that the correct transmission was received by the intended receiver but also to keep the devices from receiving erroneous signals transmitted over the air from any other devices in the vicinity.

Regarding argument B, Witte clearly teaches that communication can only be established when the two devices accept their respective ID codes as can be seen in column 5, lines 7-25.

Regarding argument C, regardless of the type of communications differences in the two pieces of art, Witte clearly teaches in communication systems the benefit of having identification signals in order to receive the correct signals that are transmitted.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis R. Hunnings whose telephone number is (571) 272-3118. The examiner can normally be reached on 8:00 am - 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TRH

DANIEL WU
SUPERVISORY PATENT EXAMINER
12/10/06